

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MASAYUKI KONDO

Appeal No. 2005-0564
Application No. 09/732,787¹

HEARD: MAY 4, 2005

Before KRASS, BARRY and SAADAT, Administrative Patent Judges.
SAADAT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the Examiner's final rejection of claims 4 and 6-8. Claims 1-3 and 5 have been cancelled.

We affirm.

BACKGROUND

Appellant's invention relates to a waterproofed terminal connecting portion of a sheathed wire wherein a terminal fitting

¹ Application for patent filed December 11, 2000, which claims the foreign filing priority benefit under 35 U.S.C. § 119 of the Japanese Application No. P.HEI.11-350661, filed December 9, 1999.

and a bare conductor of the sheathed wire are connected with each other by a molded resin portion. An understanding of the invention can be derived from a reading of exemplary independent claim 4, which is reproduced as follows:

4. A terminal structure of a sheathed wire, comprising:

a terminal fitting;

a terminal connecting portion at a rear end portion of the terminal fitting at which the terminal fitting and a bare conductor of the sheathed wire is connected; and

a molded portion which covers and waterproofs at least the terminal connecting portion,

wherein a circumferential size of the molded portion from a part corresponding to the terminal connecting portion is continuously reduced, so that a rear end portion of the molded portion has a same diameter as a diameter of the sheathed wire, and

wherein there is no increase in the circumferential size of the molded portion in a first direction parallel to a direction in which the terminal fitting extends, as the circumferential size of the molded portion is continuously reduced.

The prior art references of record relied upon by the Examiner in rejecting the appealed claims are:

Hauchard et al. (Hauchard)	4,969,845	Nov. 13, 1990
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Gerrans, Jr. (Gerrans)	5,885,108	Mar. 23, 1999
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Appellant's admitted prior art, as depicted in Figure 6 of the instant application.

Claims 4 and 7 stand rejected under 35 U.S.C. § 103 as being unpatentable over the admitted prior art and Gerrans.

Claims 6 and 8 stand rejected under 35 U.S.C. § 103 as being unpatentable over the admitted prior art and Gerrans and further in view of Hauchard.

Rather than reiterate the opposing arguments, reference is made to the briefs and answer for the respective positions of Appellant and the Examiner. Only those arguments actually made by Appellant have been considered in this decision. Arguments which Appellant could have made but chose not to make in the brief have not been considered (37 CFR § 41.67(c)(1)(vii)).

OPINION

The Examiner relies on the admitted prior art for teaching all the elements of the recited claim except for the continuously reduced portion (answer, page 3). The Examiner, however, reasons that the missing limitation is disclosed by Gerrans as molded portion 16 wherein the continuously reduced portion, in its rear end portion, has the same diameter as that of cable 22 and provides a smoother grip on the molded portion (id.).

Appellant argues that providing a "smoother grip" is nowhere disclosed in Gerrans (brief, page 5; reply brief, page 2). Appellant further asserts that it would not be clear how the

smoother grip of the outer covering 16 in Gerrans may be incorporated in the admitted prior art since the disclosure does not disclose where and/or how it would be gripped (brief, page 5). Appellant further points out that even if the electrical connector of Gerrans would be held, one would hold it at foundation portion 9 nearest to the interface, and not at outer covering 16 (reply brief, page 4).

In response, the Examiner argues that covering 16 of Gerrans provides a smoother grip by avoiding sharp or pointy edges that may be uncomfortable to a user's hand (answer, pages 5 & 6). Furthermore, the Examiner asserts that absent a specific holding/handling portion, the housing itself functions as the holding portion (answer, page 6).

As a general proposition, in rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993) and In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). A prima facie case of obviousness is established when the teachings of the prior art itself would appear to have suggested the claimed subject matter to one of ordinary skill in the art. See In re Bell, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir.

1993); In re Fritch, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992); Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985). In considering the question of the obviousness of the claimed invention in view of the prior art relied upon, the Examiner is expected to make the factual determination set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. See also In re Rouffet, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998). However, the motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. See In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

Our review of Gerrans shows that although the reference does not explicitly describe how the outer shape of the electrical connector may affect gripping the connector, the disclosed embodiments clearly show that the outer shape of the molding is selected with ease of gripping in mind. In view of what the

selected with ease of gripping in mind. In view of what the overall teachings of Gerrans would have suggested to one of ordinary skill in the art, we find the Examiner's proposed combination of the admitted prior art and Gerrans to be reasonable. Gerrans relates to an electrical connector assembly wherein a part of the cable attached to the connector is encapsulated in molded coating 16 which covers and waterproofs a part of the connecting portion and the attached cable (Figure 1; col. 3, lines 58-63). Gerrans in Figure 1 also shows a terminal fitting as the connector C with terminal fitting shown as 1 and 11 which is connected a sheathed wire 22. In fact, as contended by Appellant (reply brief, page 3), the ridged contour of the insert base 4 (Figures 1 & 1A) and the connector piece 30 (Figures 2 & 2A) provide the firm and non-slip grip for handling of the connector. Therefore, the "smoother grip" due to the narrowing profile of covering 16 does not appear to contradict the firm grip around foundation portion 9 and ridge 4 in Figure 1.

Although the quality of the grip is not specifically discussed in Gerrans, we remain unconvinced by Appellant's arguments that the absence of sharp or pointy edges may not necessarily provide smoother gripping (reply brief, page 6). In

urging this argument, Appellant ignores the knowledge of ordinary skill in the art, the need for gripping these kind of connectors for connecting them to the electrical contacts and the general teaching of Gerrans, as shown in figures 1 and 2. A motivation to combine prior art references may be found in the nature of the problem to be solved. Ruiz v. A.B. Chance Co., 357 F.3d 1270, 1276, 69 USPQ2d 1686,1690 (Fed. Cir. 2004). Here, as argued by the Examiner (answer, page 5), the contoured shape of the molded portion of Gerrans "provides a smoother gripping by avoiding substantially sharp or pointy edges that may be uncomfortable to a user's hand" and easier holding of the connector may be achieved.

In view of the analysis above, we find the Examiner's reliance on the combination of the admitted prior art and Gerrans to be reasonable and sufficient to support a prima facie case of obviousness. Accordingly, the 35 U.S.C. § 103 rejection of claim 4 as well as claim 7, grouped with claim 4 as standing or falling together (brief, page 4), over the admitted prior art and Gerrans is sustained.

Turning now to the rejection of claims 6 and 8, we note Appellants' only argument with respect to Hauchard's failure in making up for the alleged deficiency in the combination of the

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admitted prior art and Gerrans (brief, page 7). However, the Examiner's discussion of Hauchard and its teachings related to the concave grooves and convex ribs as well as the desirability of providing structural strength without added material (answer, page 4) also reasonably support a prima facie case of obviousness. Therefore, the 35 U.S.C. § 103 rejection of claims 6 and 8 over the admitted prior art, Gerrans and Hauchard is also sustained.


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CONCLUSION

In view of the foregoing, the decision of the Examiner rejecting claims 4 and 6-8 under 35 U.S.C. § 103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED


ERROL A. KRASS)
Administrative Patent Judge)


 LANCE LEONARD BARRY
 Administrative Patent Judge

BOARD OF PATENT
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MAHSHID D. SAADAT
Administrative Patent Judge

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